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SECTION TABLE OF CONTENTS

DIVISION 09 - FINISHES

SECTION 09725

VINYL WALL COVERING

06/04

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 SUBMITTALS
- 1.3 DELIVERY, HANDLING, AND STORAGE
- 1.4 GENERAL INFORMATION

PART 2 PRODUCTS

- 2.1 VINYL WALL COVERING
- 2.2 WALL COVERING ADHESIVE, PRIMER, AND SEALER
- 2.3 UL FIRE HAZARD CLASSIFICATION LISTING AND LABEL
- 2.4 METAL MOLDING AND CONTACT ADHESIVE

PART 3 EXECUTION

- 3.1 INSTALLATION
 - 3.1.1 Conditions at Building
 - 3.1.2 Preparation of Substrate Surfaces
 - 3.1.3 Metal Molding Installation
 - 3.1.4 Wall Covering Application
 - 3.1.5 Cleaning
 - 3.1.6 Excess Materials
- 3.2 ACCEPTANCE PROVISIONS
 - 3.2.1 Rejection
 - 3.2.2 Repairing
 - 3.2.3 Cleaning

-- End of Section Table of Contents --

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SECTION 09725

VINYL WALL COVERING
06/04

NOTE: Delete, revise, or add to the text in this section to cover requirements. Notes are for designer information and will not appear in the final project specification.

This section covers vinyl-coated fabric wall covering field applied to plaster and gypsum wallboard surfaces as required by the project.

Drawings must indicate the following:

Locations of vinyl wall covering

Substrate material

Details of moldings, such as wainscot cap, chair rails, if required

Color and grain of wall covering for each location when a sample of each required color and grain will not be on display during the bidding period

Wood moldings, bases and chair rails are specified in Section 06200, "Finish Carpentry."

Gypsum wallboard construction, including joint concealment treatment, is specified in Section 09260, "Gypsum Board Assemblies."

Plastering is specified in Section 09200, "Lath and Plaster."

PART 1 GENERAL

1.1 REFERENCES

NOTE: The following references should not be manually edited except to add new references. References not used in the text will automatically be deleted from this section of the project specification.

The publications listed below form a part of this section to the extent referenced:

ALUMINUM ASSOCIATION (AA)

AA 45 (2003) Designation System for Aluminum Finishes

ASTM INTERNATIONAL (ASTM)

ASTM D 1308 (2002e1) Effect of Household Chemicals on Clear and Pigmented Organic Finishes

ASTM D 751 (2000) Coated Fabrics

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

FED-STD 191 (Rev C) Textile Test Methods

FS CCC-W-408 (2003d) Wallcovering, Vinyl Coated

FS MMM-A-130 (Rev B; Int Am 3) Adhesive, Contact

UNDERWRITERS LABORATORIES (UL)

UL Bld Mat Dir (2003) Building Materials Directory

1.2 SUBMITTALS

NOTE: Review submittal description (SD) definitions in Section 01330, "Submittal Procedures," and edit the following list to reflect only the submittals required for the project. Submittals should be kept to the minimum required for adequate quality control. Include a columnar list of appropriate products and tests beneath each submittal description.

The following shall be submitted in accordance with Section 01330, "Submittal Procedures," in sufficient detail to show full compliance with the specification:

SD-02 Shop Drawings

Fabrication Drawings shall be submitted for in accordance with paragraph entitled, "General Information," of this section.

Vinyl Wall Covering consisting of fabrication and assembly details to be performed in the factory.

Installation drawings shall be submitted for vinyl wall covering in accordance with the paragraph entitled, "Installation," of this section.

SD-03 Product Data

Manufacturer's catalog data shall be submitted for the following

items.

Vinyl Wall Covering
Adhesive, Primer, and Sealer
Metal Molding
Contact Adhesive
Remnants

SD-04 Samples

Wall Covering: Three samples, 3 yards meter long by the width specified, of each color and grain to be installed in the work, as required to illustrate material weight, color, shade, decorative design, and embossing when required.

Metal Molding: Three samples, full-size by not less than 8-inches 200 millimeter long.

SD-07 Certificates

Certificates shall be submitted for Vinyl Wall Covering including the following.

Certified laboratory test reports of the physical properties for vinyl wall covering, as specified

Certificates of Compliance for UL fire hazard classification listing, as specified

Certificates of Compliance for contact adhesive

SD-08 Manufacturer's Instructions

Manufacturer's instructions shall be submitted for the following items showing printed instructions covering installation.

Wall Covering
Metal Molding
Contact Adhesive

Preventative maintenance and inspection shall be submitted for Vinyl Wall Covering showing the manufacturers recommended cleaning materials and application methods, including precautions in the use of cleaning materials that may be detrimental to the wall covering surface when improperly applied.

SD-09 Manufacturer's Field Reports

Records of vinyl wall covering system's shall be submitted in accordance with paragraph entitled, "General Information," of this section.

1.3 DELIVERY, HANDLING, AND STORAGE

Materials shall be delivered to the project site in their original packages or containers bearing labels clearly identifying the manufacturer, brand name, quality or grade, and UL fire-hazard classification when applicable.

Materials shall be stored in their original, unbroken packages or

containers, in a weathertight and dry place having a temperature not less than 65 degrees F 18 degrees C, for at least 24 hours before the start of wall covering installation.

1.4 GENERAL INFORMATION

Fabrication Drawings shall be submitted for vinyl wall covering systems consisting of fabrication and assembly details to be performed in the factory.

Records of vinyl wall covering manufacturer's name or trademark, wall covering brand name, color, and grain designation shall be submitted.

PART 2 PRODUCTS

2.1 VINYL WALL COVERING

Vinyl wall covering shall be an integrally pigmented, opaque vinyl film, laminated to, or combined with, a fabric backing.

NOTE: Delete the following paragraphs when medium-duty type wall covering is not required. Medium-duty type wall covering is suitable for use in vestibules, corridors, lounges, offices, and other areas where there is average traffic and scuffing, and is available in a wide range of colors and grains. Mildew-resistant fabric backing is standard treatment with several wall covering manufacturers.

Wall covering shall be medium-duty type, finish as specified, conforming to FS CCC-W-408, Type II, and the following modifications:

Supporting material for wall covering may be mildew-resistant treated at the option of the wall covering manufacturer.

Physical properties shall be as follows:

| <u>REQUIREMENT</u> | <u>TEST METHOD</u> | <u>VALUE</u> |
|---|------------------------|--|
| Coating weight, exclusive of fabric backing | FED-STD 191, Test 5041 | Not less than 7 ounces 240 gram per square yard meter |
| Adhesion of coating to fabric backing | ASTM D 751 | Not less than 3 pounds 13 newton pull per inch25 mm of width |

NOTE: Delete the following paragraphs when heavy-duty type wall covering is not required. Heavy-duty type vinyl wall covering is recommended for use in areas exposed to damage by moving equipment and is available in several colors and a leather-like grain.

Wall covering shall be heavy duty type, finish as specified, conforming to FS CCC-W-408, Type III, and the following modifications:

Supporting material for wall covering may be mildew-resistant treated at the option of the wall covering manufacturer.

Physical properties shall be as follows:

| <u>REQUIREMENT</u> | <u>TEST METHOD</u> | <u>VALUE</u> |
|---|---------------------------|---|
| Coating weight, exclusive of fabric backing | FED-STD 191, Test 5041 | Not less than 12 ounces 407 gram per square yard meter |
| Adhesion of coating to fabric backing | ASTM D 751 | Not less than 3 pounds 13 newton pull per inch25 mm of width |

NOTE: Delete the following paragraphs when stain-resistant vinyl wall covering is not required. Polyvinyl-fluoride (DuPont "Tedlar") top coating, in lieu of the standard vinyl coating, increases both chemical resistance and stain resistance.

This wall covering is recommended for use in dining rooms, waiting rooms, and other areas exposed to chemical reagents and staining agents and is available, at increased cost, in most standard vinyl wall covering colors and grains.

Wall covering shall be stain-resistant, medium duty type, finish as specified, with a polyvinylfluoride film top coating, conforming to FS CCC-W-408, Type II, and the following modifications:

Supporting material for wall covering may be mildew-resistant treated at the option of the wall covering manufacturer.

A clear polyvinylfluoride film, not less than 0.005-inches 0.13 millimeter thick shall be used as a top coating.

Physical properties shall be as follows:

| <u>REQUIREMENT</u> | <u>TEST METHOD</u> | <u>VALUE</u> |
|---|---------------------------|---|
| Coating weight, exclusive of fabric backing | FED-STD 191, Test 5041 | Not less than 7 ounces 240 gram per square yard meter |
| Adhesion of coating to fabric backing | ASTM D 751 | Not less than 3 pounds 13 newton pull per inch25 mm of width |

| <u>REQUIREMENT</u> | <u>TEST METHOD</u> | <u>VALUE</u> |
|--|--------------------|--|
| Stain-resistance, covered spot test, 24-hour exposure, using the household chemical reagents and staining agents specified in ASTM D 1308 and the following: ballpoint pen ink lipstick nicotine shoe polish stamp-pad ink rubber scuff marks crayon merthiolate | ASTM D 1308 | No perceptible staining or bleaching of coating; stains readily removed with solvent or cleaning agent |

NOTE: Since the color and grain of wall coverings are the factors that determine the cost of the material, it is recommended that a sample of the required color and grain be on display where it may be seen by bidders during the bidding period.

Color and grain of wall covering shall match that of the sample approved.

Width of wall covering shall be 53 to 54 inches 1350 to 1370 millimeter.

2.2 WALL COVERING ADHESIVE, PRIMER, AND SEALER

Wall covering adhesive, primer, and sealer shall comply with the vinyl wall covering manufacturer's recommendations. These materials shall be mildew-resistant and nonstaining to the wall covering coating.

2.3 UL FIRE HAZARD CLASSIFICATION LISTING AND LABEL

Vinyl wall covering and adhesive shall be listed in UL Bld Mat Dir and shall bear UL label and marking indicating the fire-hazard classification of the wall covering as applied to non-asbestos-cement board and using the adhesive recommended by the wall covering manufacturer, as follows:

Flame spread shall be not more than 25.

Fuel contributed shall be not more than 15.

Smoke developed shall be not more than 50.

2.4 METAL MOLDING AND CONTACT ADHESIVE

NOTE: Delete paragraph heading and following paragraphs when metal moldings are not required.
 Wood moldings are specified in Section 06200, "Finish Carpentry."

Metal molding shall be a factory-fabricated product of extruded aluminum alloy 6063-T52 with fine satin mechanical finish, and clear Architectural Class II anodic coating conforming to AA M31A31 as specified in AA 45 for finish on exposed surfaces, and especially manufactured for use with vinyl wall covering. Metal molding shall be one-piece, cap-strip type, 5/8-inch 16 millimeter wide by approximately 1/16-inch 2 millimeter thick, with the wall flange tapering to a feather-edge and having nail holes spaced not more than 6 inches 150 millimeter on center, and with round lip having 3/16-inch 5 millimeter wide exposed face, and a 1/8-inch 3 millimeter deep by 1/16-inch 2 millimeter wide slot to receive the wall covering.

Contact adhesive shall be a light-colored solvent system having a polychloroprene-elastomer base conforming to FS MMM-A-130 and the following modification:

Contact adhesive manufacturer shall certify in writing that the adhesive will firmly bond clean, dry, smooth surfaces of aluminum and gypsum wallboard to each other, and aluminum and plaster to each other.

PART 3 EXECUTION

3.1 INSTALLATION

3.1.1 Conditions at Building

Spaces to receive vinyl wall covering shall be maintained at a temperature of at least 70 degrees F 21 degrees C at wall base level for at least 48 hours prior to, during, and for 48 hours after the completion of the wall covering installation.

Specified materials shall be installed only when ambient temperature and humidity conditions approximate the interior conditions that will exist when the building is occupied.

3.1.2 Preparation of Substrate Surfaces

Surfaces to receive specified materials shall be clean, smooth, thoroughly cured, and free from materials detrimental to achieving the required bond.

Before start of wall covering application, plaster surfaces shall be tested for moisture content with a moisture detector. Moisture content shall not exceed the percentage recommended by the wall covering manufacturer.

Substrates surfaces shall be primed or sealed in accordance with the wall covering manufacturer's recommendations for the type of substrate material.

3.1.3 Metal Molding Installation

NOTE: Delete the paragraph heading and the following paragraphs when metal molding is not required. Location of metal molding must be indicated on the drawings.

Metal molding shall be provided at wainscot caps and at the perimeter of wall openings, as indicated.

Metal molding shall be provided at the perimeter of wall openings, as indicated.

Metal molding shall be installed by nailing and cementing to the wall surface.

Surface preparation and application of contact adhesive shall be in accordance with contact adhesive manufacturer's printed directions. Nailing of the metal molding shall be through the holes provided in the molding. Horizontal joints shall be tightly butted together; corner joints shall be mitered. Nail size and the manner of installation of the metal molding shall be in accordance with the metal molding manufacturer's instructions.

3.1.4 Wall Covering Application

Application of adhesive and wall covering shall be in accordance with the wall covering manufacturer's approved descriptive data, and as specified. Wall covering seams shall be vertical and plumb, and at least 6 inches 150 millimeter away from any corner; horizontal seams will not be permitted. Wall covering shall be continuous over internal and external corners. Switchplates, wallplates, and surface-mounted fixtures shall be removed and the wall covering shall be cut evenly to the edges of the outlet box or support. Selvages shall be trimmed in the field; trimming shall be sufficient to ensure color uniformity and matching of grain from one wall covering panel to the panel butted against it. Edges shall extend not less than 1/2 inch 15 millimeter behind the applied base.

3.1.5 Cleaning

Wall covering surface shall be cleaned of excess adhesive and soil in accordance with the wall covering manufacturer's cleaning instructions.

3.1.6 Excess Materials

After completion of wall covering installation, usable Remnants, as determined by the Contracting Officer, shall be separated by type, color, and pattern, and rolled and wrapped for protection from dirt, moisture, and infestation.

3.2 ACCEPTANCE PROVISIONS

3.2.1 Rejection

Vinyl wall covering work will be rejected for any of the following deficiencies:

Wall covering having colors and grains that do not match the color or grain of the approved sample

Finished wall covering having horizontal seams, out-of-plumb vertical seams, open seams, air pockets, buckles, wrinkles, loose edges, mismatched panels, or stains that cannot be removed by cleaning

NOTE: Delete the following paragraph when metal
molding is not required.

Metal molding in place having open joints, failure of bond to the substrate, or deviation from the horizontal or vertical greater than plus or minus 1/16 inch 2 millimeter.

3.2.2 Repairing

Damaged and unacceptable portions of completed work shall be removed and replaced with new work to match adjacent surfaces at no additional cost to the Government.

3.2.3 Cleaning

Surfaces of the new work, and adjacent surfaces soiled as a result of the work, shall be cleaned. Equipment, surplus materials, and rubbish from the work shall be removed from the site.

-- End of Section --